

Work Order ID 139679

December 01, 2015 9:16:02 AM

139679

Need Very Soon -

has to ship Dec 23

but is required in another w/o

Page 1

Item ID: D212-725-1-245

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Cam

Start Date: 12/1/2015

Start Qty: 2.00

2

Cust Item ID:

Required Date: 12/23/2015

Req'd Qty: 2.00

2

Customer:

Reference:

20151201

Approvals:

Process Plan: SU

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D212-725-1

G-PRELIM

100

0.00

100

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blanks 3.250" long

6

0

DAS
20
9-89

15-12-09

110

0.00

110

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

Machine as per folio FA844 and DWG

Folio rev: AA

Dwg Rev: A

Deburr as per Dwg

6

0

DAS
20
9-89

15-12-09

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 139679

139679

Page 2

December 01, 2015 9:16:02 AM

Item ID: D212-725-1-245

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Cam

Start Date: 12/1/2015 Start Qty: 2.00 ***2***

Cust Item ID:

Required Date: 12/23/2015 Req'd Qty: 2.00 ***2***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC2- Inspect parts off machine FAI/FAIB	0.00				6	0		DAS 20 9-89 15-12-09
120									
QC	Memo	0.00							
Quality Control									
130		0.00				5	1		J.C.L. 15/12/11
130									
Mill Conv	Memo	0.00							
Conventional Milling Machine	Drill & tap as per Dwg								
140	QC2- Inspect parts off machine FAI/FAIB	0.00				5	1		J.C.L. 15/12/11
140									
QC	Memo	0.00							
Quality Control									

PTD →

DQA:

Date:

16/02/04

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed:

Date:

16/00/04

Work Order update only ☐

Work Order: <u>139 679</u> Part No. <u>D212-725-1-245</u> NCR No. <u>16-5579</u>	DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☒</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☒	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																																	
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Date: <u>15/12/11</u>	Step #: <u>130</u>	QTY Effective: <u>1</u>		MRB (QSI042) Approval																																																																																	
Description Work Order Deviation		Disposition		<u>PD 15-12-11</u> Completed By <u>J.C.L. 15/12/11</u> Lead hand / Supervisor Approval Verification <u>OK 15/12/11</u> QC / QA Coordinator Approval <u>PD 15-12-11</u>																																																																																	
Center drill of 0.275 (bad positioning) to be at .375. missing thread for the helicoil R.C. operator error / not second checking.		scrap and no replace destroy.																																																																																			
<table style="width:100%;"> <tr> <th colspan="4" style="text-align: left;">Root Cause</th> <th colspan="4" style="text-align: left;">FAULT CATEGORY</th> </tr> <tr> <td style="width:12.5%;">Environment ☐</td> <td style="width:12.5%;">No Re-verification ☐</td> <td style="width:12.5%;">Pressure/Forced ☐</td> <td style="width:12.5%;">Temperature/Cure ☐</td> <td style="width:12.5%;">Power Loss/Surge ☐</td> <td style="width:12.5%;">Positioned Wrong ☐</td> </tr> <tr> <td>Design ☐</td> <td>Operator ☒</td> <td>Bending ☐</td> <td>Set-up ☐</td> <td>Folio/Program ☐</td> <td>Outside Dimensions ☐</td> </tr> <tr> <td>Doc/Data ☐</td> <td>Offset/Setup ☐</td> <td>Centre Not Concentric ☐</td> <td>BOM/Route ☐</td> <td>Grain ☐</td> <td>Over/Under tolerance ☐</td> </tr> <tr> <td>Equip/Tooling ☐</td> <td>Supplier ☐</td> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> <td>Weld ☐</td> <td>Part Incorrect ☐</td> </tr> <tr> <td>Handling/Pre ☐</td> <td>Training ☐</td> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Inspection Incomplete/Unqualified ☐</td> <td>Wrong Stock Pulled ☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td>Material ☐</td> <td>Use for Testing ☐</td> <td>Cuffs ☐</td> <td>Contamination ☐</td> <td>Out of Sequence ☐</td> <td>Part Moved ☐</td> </tr> <tr> <td>Internal Transport ☐</td> <td>Poor Information ☐</td> <td>Crushing ☐</td> <td>Countersink ☐</td> <td>Off-set ☐</td> <td>Drawing ☐</td> </tr> <tr> <td>Tribal Knowledge ☐</td> <td>Rushing ☐</td> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> <td>Mislabeled ☐</td> <td>Finish ☐</td> </tr> <tr> <td>LOA ☐</td> <td>Product Improvement ☐</td> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Fit/Function ☐</td> <td>Misread ☐</td> </tr> <tr> <td>Substation ☐</td> <td>Process Improvement ☐</td> <td>Marks/Chatter ☐</td> <td>☒ Drill Holes</td> <td>Misaligned/off center ☐</td> <td>Turning Sequence ☐</td> </tr> <tr> <td>Past Expiry Date ☐</td> <td>Manufacturing Process ☐</td> <td colspan="4" style="text-align: left;">OTHER: ☐</td> </tr> <tr> <td>Misidentified ☐</td> <td>Past Due ☐</td> <td colspan="4"></td> </tr> </table>						Root Cause				FAULT CATEGORY				Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☒	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	☒ Drill Holes	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER: ☐				Misidentified ☐	Past Due ☐				
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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
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				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
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Work Order ID 139679

December 01, 2015 9:16:02 AM

139679

Page 4

Item ID: D212-725-1-245

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Cam

Start Date: 12/1/2015 Start Qty: 2.00

2

Cust Item ID:

Required Date: 12/23/2015 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

0.00

180

Small Fab

Memo

0.00

Small Fab

Insert Helicoil as per Dwg

5

FF

DEC 14 2015

190

QC5- Inspect part completeness to step on W/O

0.00

190

QC

Memo

0.00

Quality Control

(5) 15-12-15

DAS
9
9-89

inspected as per
dwg. D4163 rev A

200

Identify as per dwg & Stock Location: 5-573

0.00

200

Packaging

Memo

0.00

Packaging

5

DEC 16 2015

DAS
0
0-86

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Root Cause				FAULT CATEGORY			
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Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
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				OTHER : ☐			

Work Order ID 139679

December 01, 2015 9:16:02 AM

139679

Page 5

Item ID: D212-725-1-245

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Cam

Stop ***NS2***

Start Date: 12/1/2015 Start Qty: 2.00

2

Cust Item ID:

Required Date: 12/23/2015 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

210

QC21- Final Inspection - Work Order Release

0.00

210

QC

Memo

0.00

Quality Control

ML5

DEC 17 2015

SH 20151216

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

December 01, 2015 9:16:28 AM

Page 1

Work Order ID: 139679

139679

Parent Item: D212-725-1-245

D212-725-1-245

Parent Item Name: Cam

Start Date: 12/1/2015

Required Date: 12/23/2015

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP RevA: New issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS21209F1-15 *MS21209F1-15* HELI COIL		Purchased	No			160	Each	330.0000	2	4 10			
										**	88 15-12-14		

PTO

Location	Loc Qty	Loc Code
CA	178	
m129682	178	
ST296	152	
m126741	7	
m130505	40	
m130626	27	
m130799	78	

M6061T6B0.625X02.50
0

Purchased No

100 f 14.1700 0.3 0.631579

M6061T6B0 625X02 500

**

1.700'

DAS
20
9-89 15-12-09

6061-T6 Bar .625 x 2.50

Location	Loc Qty	Loc Code
MAT002	14.17	
M128865	2.17	
M129972	12	

1.700'

Helicoid MS 2120 FT-15 in 130505 scraped when melting in
212 725-1-245 lip bend away Tool went right Thru FF DEC 14 2015

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA:

Date: DEC 14 2015

QA Closed: 

Date: 16/02/2016

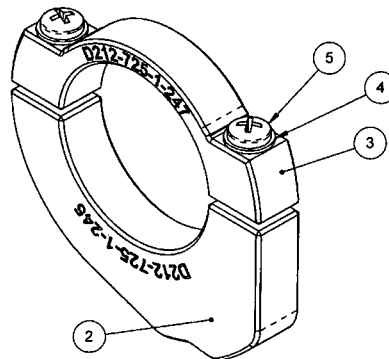
Work Order: <u>139679</u>	DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Work Order Update ☐	AGAINST DEPARTMENT/PROCESS			
Part No. <u>MS2120FI-15</u>		Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
NCR No. <u>16-5574</u>		Machining ☐	Small Fab ☒	Prod. Eng. Coord. ☐	Quality ☐
		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
		Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	Dec-14 2015	180	1	at installation of MS21209 FI-15 m130505 Tap on Heli-coil bend away.	DAS 9 9-89	Scrap/Replace with MS212FI-15. m130505	FF DEC 14 2015	DAS 9 9-89 15-12-29	DAS 9 9-89 15-12-29
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General
☐ Bending	☐ Bend
☐ Centre Not Concentric to O/S	☐ BOM/Route
☐ Cracks	☐ Broken/Damaged
☐ Crushed/Crimped.	☐ Burrs
☐ Cuffs	☐ Contamination
☐ Heat Treat	☐ Countersink
☐ Inspection Strip in Tube	☐ Cut Too Short
☐ Ripples in Bend	☐ Drill Holes
☐ Torque Waves in Extrusion	☐ Drawing
☐ Turning Sequence	☐ Finish
☐ Wave/Twist in Tube	☐ Folio
	☐ Grain
	☐ Hardware
	☐ Inspection Incomplete
	☐ Instructions Incomplete/Unclear
	☐ Maintenance
	☐ Misabeled
	☐ Misread
	☐ Offset
	☐ Out of Calibration
	☐ Out of Sequence
	☐ Outside Dimensions
	☐ Ovalized
	☐ Over/Under tolerance
	☒ Part Incorrect
	☐ Part Lost/Missing
	☐ Part Moved
	☐ Positioned Wrong
	☐ Power Loss/Surge
	☐ Pressure/Forced
	☐ Temperature/Cure
	☐ Weld
	☐ Wrong Stock Pulled
	☐ Other

ITEM	QTY -947	PART NUMBER	DESCRIPTION
1	X	D212-725-1-947	CAM ASSEMBLY
2	1	D212-725-1-245	CAM BASE ASSEMBLY
3	1	D212-725-1-247	RETAINER
4	2	NAS1149D0332J	WASHER
5	2	MS27039-1-15	SCREW



D212-725-1-947 CAM ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.4
- 7) WEIGHT: 0.21 lbs

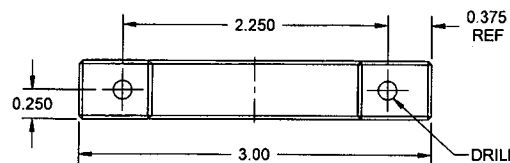
RELEASED
2011-08-23
AND

20151201

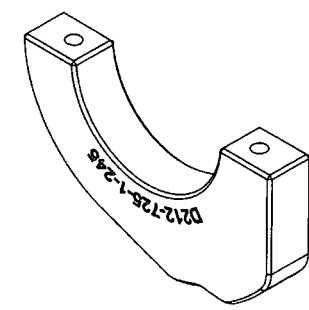
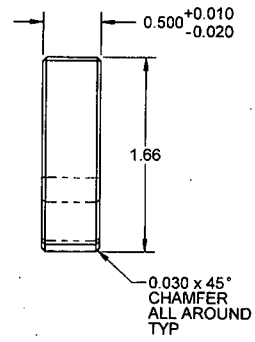
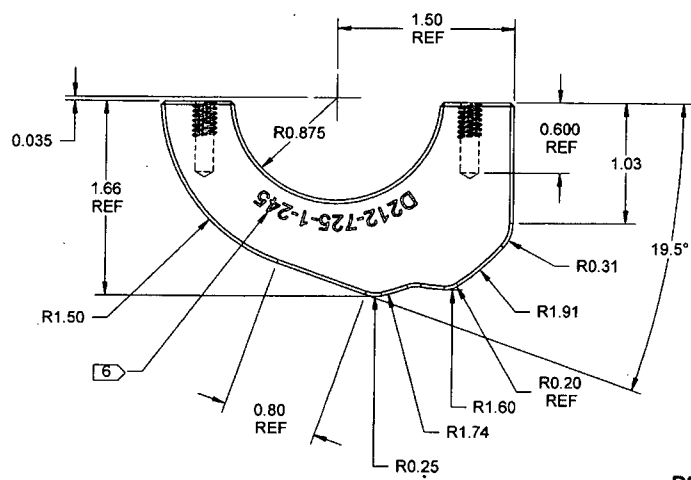
SH139679

A	NEW ISSUE	RF	11.02.24
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED	<i>[Signature]</i>		
MFG. APPR.	<i>[Signature]</i>		
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	11.02.24		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D4163	REV. A SHEET 1 OF 3
TITLE CAM ASSEMBLY	SCALE NTS
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DRILL AND TAP FOR #10-32 HELICOIL INSERT
 Ø0.203 x 0.600 DP
 2 PL
 INSTALL HELICOIL MS21209-F1-15 OR EQUIVALENT
 FLUSH WITH SURFACE



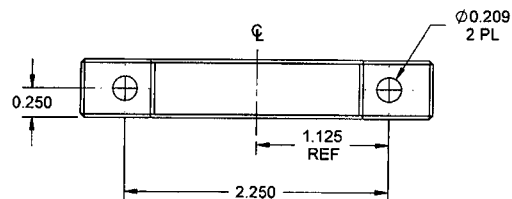
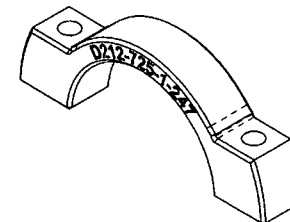
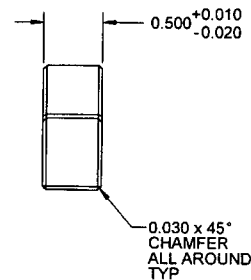
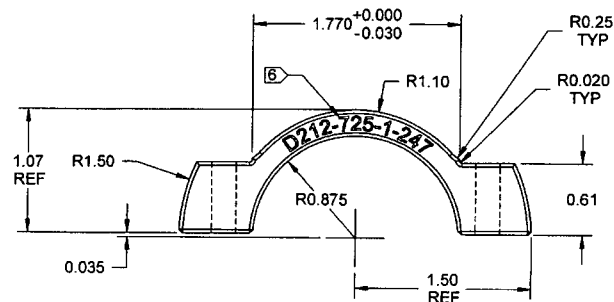
D212-725-1-245 CAM BASE ASSEMBLY

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ALUMINUM BAR
 PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
 PER AMS-QQ-A-200/8 (OR AMS 4160)
 REF. DART SPEC. M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO ASSEMBLY
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3 AS SHOWN
- 7) WEIGHT: 0.14 lbs

RELEASED
 2011-08-23
MD

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DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO. D4163	REV. A
MFG. APPR.	<i>[Signature]</i>	SHEET 2 OF 3	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	CAM ASSEMBLY	NTS
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D212-725-1-247 RETAINER

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ALUMINUM BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
PER AMS-QQ-A-200/8 (OR AMS 4160)
REF. DART SPEC. M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3 AS SHOWN
- 7) WEIGHT: 0.05 lbs

RELEASED
2011-08-25
WNA

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. A
MFG. APPR.	RF	D4163	SHEET 3 OF 3
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	CAM ASSEMBLY	NTS
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